

REMARKS

The present Amendment After Final Action is submitted to place this case in better form for appeal or in immediate condition for allowance.

1. Claims 4 to 7 are in the case. Some minor corrections have been made in claims 5 and 6, the first to eliminate a typographical error and the second to ensure proper antecedent basis for the vitreous ceramic there recited.

2. The rejection of claim 6 in the case relies at least in part upon the combination of PRASAD et al, ABE et al and DEJNEKA. The latter patent, United States Patent 5,955,388, has an effective date as a reference as of its United States filing date of 2 October 1997.

Through the PCT and the International Convention, the present application has an effective date of 21 May 1997, the priority date of the Romanian application upon which the PCT was based. There is enclosed a certified copy of the Romanian application, the priority of which is claimed, and a translation thereof made by the inventor Eugen PAVEL who is conversant with the Romanian and English languages. The translation is certified as correct under 18 USC 1001 since the Romanian application as is clear from the translation, and the PCT application cover the same

subject matter, the DEJNEKA patent has been antedated and the rejection of claim 6 must be withdrawn. Claim 6 is allowable.

3. The rejection of claims in the case is respectfully traversed also on the ground that neither PRASAD et al, Patent 5,912,257, nor ABE et al, Patent 4,703,019 discloses a vitreous fluorescent photosensitive body selected from the group which consists of fluorescent photosensitive glass and fluorescent photosensitive vitreous ceramic, and certainly neither discloses a fluorescent photosensitive vitreous ceramic.

As to the latter point, the Examiner should appreciate that Applicant is the inventor of florescent photosensitive vitreous ceramics as is quite clear from United States Patent 6,228,787 and 6,132,643.

While the Examiner has recognized that PRASAD et al does not specifically disclose a fluorescent vitreous ceramic, he fails to note that there are no other references predating Applicant's work which disclose that material either and thus, no rejection on PRASAD et al can stand against any claim which recites a vitreous fluorescent ceramic which is also photosensitive.

Applicant notes that the ABE et al reference which has also been relied upon by the Examiner does not disclose a fluorescent photosensitive vitreous ceramic either. At column 2, lines 21 to 37 the ABE et al reference states:

"As will be understood from the above indicated glass composition a photosensitive glass according to the invention is produced from inexpensive raw materials without need for any dopant. By irradiation with ultraviolet rays longer than about 350 mm in wavelength this glass rapidly becomes yellowish brown in color, and very deep coloration is possible. By using a mask of a desired pattern it is possible to produce a clear and high-contrast ratio image. The yellowish brown color does not fade by termination of irradiation with UV rays, but bleaching of the colored glass can easily be accomplished by heating at about 150° to 300° C, for a very short time. The coloration and bleaching can be repeated many times without causing deterioration of the photosensitive property of the glass. Therefore, a photosensitive glass according to the invention is very suitable for optical memories."

The underscoring derives from Applicant's copy of the reference and probably was an emphasis by the Examiner. The word "fluorescent" does not appear there nor is there a suggestion there that the photosensitive glass is a fluorescent glass. Since the basic material used here was invented by the Applicant and did not exist before, there is no way that a combination of references which do not disclose individually or in combination fluorescent

photosensitive vitreous ceramic could suggest any claim in this case.

4. All of the claims have been rejected on a combination of PRASAD et al with ABE et al, with or without DEJNEKA which has previously been disposed of. In column 41, lines 43 to 64 of PRASAD fluorescent materials are mentioned but there is no mention of a fluorescent photosensitive glass or vitroceramic. As a consequence, there is no way that one of ordinary skill in the art having PRASAD et al and ABE et al before him could from these two references form a system which meets any one of claims 4 through 6.

The rejection of claim 7 also cannot stand. The Examiner's statement with respect to claim 7 at pages 3 and 4 of the Office Action are deemed to be in error for the following reasons:

The sentence "An engine [magnetic coil; not shown] for rotating said memory" is false because in PRASAD patent there is not a single mention about rotary memory. Two magnetic coils are designed to control the movement in two directions X-Y, linear movements not rotating. Usual confocal microscopes have only X-Y stage.

The sentence "An excitation laser [fig. 31, unit 10], having a beam perpendicular to a fluorescent beam from said memory and provided with a vertical scanner [Col. 72, line 41 to Col. 73, line 32] for reading said memory by one photon process [col. 42, lines 17 - 30 and FIG. 16]" is false.

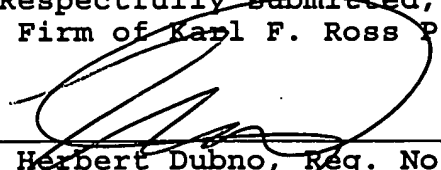
As one can see in FIG. 31 of the PRASAD patent, the excitation beam inside the memory is parallel with the fluorescence beam, while in FIG. 1 of US Patent Application Serial NO. 09/424,272 the excitation beam of laser (2) used for one-photon processes is perpendicular to the fluorescence beam.

It's obvious to see that the two systems are basically different regarding the movement type of the memory and the reading in one-photon mode.

As a consequence, claim 6 is allowable because the DEJNEKA reference has been antedated and claims 4 to 7 are allowable since the combination of PRASAD et al with ABE et al does not make any of these claims obvious. Claim 7 is additionally believed to be allowable since the Examiner's statements as to this claim and the structure in the art is simply believed to be erroneous.

Allowance of claims 4 to 7 is requested.

Respectfully submitted,  
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Enc: Certified copy of the Romanian  
application and translation

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